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For some years now, antitrust policy towards horizontal mergers has been evolving. It is plain to me that some sort of change was earnestly needed; whether the changes that have taken place or those that are now proposed by the Reagan Administration are the appropriate ones is not quite so clear.

In the years folowing _Brown Shoe_[1] two views became perniciously intertwined. These were: first, the older view that Section 7 of the Clayton Act was designed to thwart monopoly power "in its incipiency"[2]; second, that the definition of markets or "submarkets" (whatever they are) is readily accomplished, with the parlance of businessmen ("the Chicago drug-store market", "the high-fashion shoe market") substituting for serious economic analysis. The result was that mergers could be and often were successfully challenged if the merging firms overlapped in their product lines and had even a small fraction of some "market", even if it was obvious that the merger by itself could not materially affect competition. (Perhaps the ultimate case in this line was _Von's Grocery_[3] where a grocery store acquisition in Los Angeles was ruled illegal even though the merged firms had only 7.5% of retail grocery business, there were 150 grocery chains and 3,800 stores in operation, and entry could hardly said to be difficult.) Since there certainly can be procompetitive, efficiency reasons for mergers, there are clear

social costs to having an over-stringent policy.

There are, to be sure, serious reasons for the "incipiency" doctrine. At one level, there is the language of Section 7 itself which speaks in terms of mergers the effect of which "may be substantially to lessen competition or to tend to create a monopoly." (It is for this reason that the administration proposes to change the language to "substantially reduce competition.") More fundamentally, there are substantive reasons for such a standard, and these are reasons for not changing the language.

In the case of single-firm monopolies, we have had, at least since the ALCOA case[4], a legal doctrine that permits us to attack non-competitive market structures even if the firm involved has done nothing wrongful in itself but has deliberately acted to achieve the market structure in question.[5] There is no parallel doctrine in the case of tight oligopoly.[6] Hence, even where we are sure that the structure of the market is highly conducive to conscious parallelism, no antitrust attack on that structure is likely to succeed (or even be attempted). Only explicitly or implicitly collusive acts can be successfully attacked, and even a win by the Government will leave in place the very structure that makes it likely that similar anticompetitive events will occur again.[7]

Of course, it will sometimes be the case that no structural remedy for tight oligopoly is possible. Just as there are natural monopolies, there are natural oligopolies, and, just as the inevitability of a monopoly-like structure is (or ought to be) a defense under Section 2 of the Sherman Act, so the inevitability

of a tight oligopoly structure ought to be a defense under a structurally-oriented anti-oligopoly act. But at present that is not an issue, because such an act does not exist.

The closest thing that we do have to such an act is Section 7. Where a merger or a series of mergers will result in a tight oligopoly structure, Section 7 with its present language permits us to prevent it. What is more, the move to a tight oligopoly structure can be halted at a time when the "inevitability" of that structure can be most easily examined by weighing the pro- and anticompetitive effects of the merger in the context of the pre-merger situation. Finally, since, as a practical matter, it is generally far easier to enjoin a merger than to order complex divestiture afterward, there is something to be said for dealing with structural oligopoly "in its incipiency" by dealing with the mergers that will create it.

There are, however, problems here. Consider the case in which a tight oligopoly structure will be attained through a series of mergers if they are not stopped. In such a situation, dealing with the problem through merger policy rather than directly runs certain risks. On the one hand, if antitrust attack begins with the first merger in the series, it may stop a merger which is in itself innocent and even pro-competitive simply because the Court or the Justice Department envisages it as the forerunner of a line of mergers that may never happen. On the other hand, if antitrust attack waits for later mergers when anticompetitive effect seems certain, one can regard the participants in those merger as being treated unfairly. Further, such

a policy can provide an incentive to merge while the merging is good. A structural anti-oligopoly policy, by contrast, would involve all the participants in the oligopoly -- rather than only those involved in a single transaction -- as defendants.

As it has turned out, merger policy has erred in the direction of the first problem -- attacking particular mergers because the Kantian categorical imperative shows that many mergers like them would together be anticompetitive. This carries the incipiency doctrine too far. On the other hand, the attempt of the administration to change the language of Section 7 to require a "substantial reduction in competition" will lead to the second problem -- attacking only later mergers in an otherwise symmetric series.

There is no solution for this in the realm of merger policy. The problem arises because we attempt to make merger policy substitute for a structural policy towards oligopoly. It is at best an imperfect substitute.[8]

The pursuit of any structural policy towards oligopoly, however, presupposes that we can recognize anti-competitive structures when we see them. That would be a requisite of a direct structural policy, and it is crucial for the necessarily more indirect approach embodied in merger policy. Unfortunately, that requisite is not easy to meet, and there is a temptation to avoid difficult analysis in favor of easily measured, but incorrect standards. While some progress has recently been made, this problem pervades all aspects of merger policy.

The area in which some progress has been made is that of market definition, in which the Department of Justices's Guide-

lines[9] have focussed on the right sort of things.

Market definition is an artificial problem created by antitrust litigation. For any other purpose of economic analysis, the binary question of whether particular firms or products are "in" or "out" of a given market is a meaningless one. Even in antitrust cases, that question is not a useful one if substantive results turn on the answer. What matters are the constraints that other firms and products put on the power of those whose actions are being examined. The proposition that flexible wrapping papers substitute for cellophane at a high cellophane price but not at lower ones already contains a good deal of information concerning the ability of a sole supplier of cellophane to charge monopoly prices. There is nothing to gain and much to lose by the Procrustean device of summarizing that information either in the statement that flexible wrapping papers and cellophane are "in" the same market (the Supreme Court's position in Cellophane) or in the statement that they are not (the position of many commentators).[10]

Such Procrustean activity, however, has historically been of overwhelming importance in antitrust cases. Instead of market definition being used as a device for summarizing and organizing information, it has become the principal issue. To return to merger cases, one need know little about the facts of Nestlé's acquisition of Stouffers in the mid-1970s to know that analysis in that case was not helped by a debate over whether there is a "market" consisting of high-priced, frozen, non-ethnic entrées.[11]

If market definition is to be at all useful in antitrust

cases, it must be the beginning, rather than the end of analysis. Market definition ought properly to define the universe of discourse within which analysis will take place. This means that the "market" should include those firms and products necessary to the understanding of the pricing and product behavior in the "market". An alternative way of putting this is to say that the "market" must include those firms and services that act to constrain the activities of the firm or firms that are the object of attention. That such constraints may not all be equally powerful merely points to the facts that analysis does not end when the market has been defined and that simple-minded measures of power or concentration, like simple-minded binary treatments of market definition, are unlikely to be adequate. I return to this below.[12]

The Department of Justice (DOJ) Merger Guidelines (in both the 1982 and 1984) versions, are a major step in the direction of sanity here. DOJ defines a "market" as the minimum collection of firms that could, if they colluded, profitably raise prices five percent above current levels for a year. Putting the details aside for a moment, this is plainly the right approach. If prices cannot be so raised, then supply or demand substitutability puts important constraints on the power of those already included. To leave those constraints out of the "market" would be to have much of the action take place off stage. The Guidelines implicit focus on constraints as the principal question to be asked in market definition is absolutely right.

It is less clear that the specific details of the Guidelines' approach are correct. Is five percent the correct thres-

hold amount to use for price rises? Is one year the correct amount of time? Should the five percent be applied to current price levels or to something else?

I begin with the third of these questions, since the answer to it has implications for the answers to the first two. The use of current levels as the base for the test is consistent with the view that merger policy is a preventive, designed to keep matters from getting worse. On the other hand, if one takes the view that merger policy is a substitute for a structural policy towards oligopoly, then one may want to use competitive rather than current levels as the base. Consider an already fairly tight duopoly in which prices have already been raised to within five percent of the level at which a competitively-produced substitute product (flexible wrapping papers) can compete. The present _Guidelines_ would let the duopoly merge, since the market would have to include the producers of the substitute. Since conscious parallelism may not always be easy to maintain, permitting such a merger may make permanent a situation that otherwise might not last. (A similar statement applies where there are more than two firms in the original oligopoly.) Further, since the merger of the two duopolists is not "economically inevitable" or solely the result of "superior skill, foresight, and industry,"[13] there is the possible anomaly that the _Guidelines_ used in the administration of the supposedly more stringent Clayton Act, would permit a merger leading to a monopoly that could then be successfully challenged under Section Two of the Sherman Act.

On the other hand, while the use of current price levels

implies an acceptance of existing power and behavior, the use of competitive levels has its own problems. It is not easy to know just what competitive prices would be, in practice. If such prices were used as the base, there would be a serious danger that DOJ would simply look at profits or profits-sales ratios in a mechanical attempt to compute competitive prices. This would be a mistake, both because profits play an important role in competitive industries and are not absent save in long-run equilibrium, and because accounting measures of profits or the profits-sales ratio do not tell one what one wants to know.[14]

If that danger can be avoided, however, the difficulty in knowing what competitive price levels are is more apparent than real in this context. The kind of qualitative analysis required to decide whether market participants can raise prices above competitive levels is precisely the kind of analysis required to do a sensible job of market definition by considering the constraints on behavior. It is not particularly different in kind from the qualitative analysis now required by the use of current levels as the base. Only if detailed quantitative analysis were to be performed would the exact location of competitive price levels matter, and such analysis is typically not practical anyway.

As this suggests, the question of whether five percent is the correct figure for the test may not be very important. The five percent figure does serve to focus attention on the sort of effects that will be considered important, but beyond that it serves only to give a spurious impression of precision to an analysis that is generally imprecise. On the other hand, quanti-

tative analysis need not always be impossible, so there is some point in considering whether five percent is a reasonable figure to use.

The answer here depends on the costs and benefits involved. By using a high figure, one allows mergers to slip by that may lead to elevated prices and welfare loss. On the other hand, by using a low figure, one runs the risk of prohibiting mergers that are relatively harmless and may have efficiency reasons. Further, one bears the cost of administrative or judicial proceedings in order to stop a fairly small harm. Since it is impossible to decide where to draw the line without a detailed analysis of the likely welfare losses and gains in each case, five percent seems to me to be a sensible administrative rule. As indicated, however, I would apply it to competitive rather than to current price levels, which suggests a more stringent rule for already non-competitive industries than DOJ now uses.

I take a different view on the use of one year as the time criterion for the test. Together with two years as the time in which entry will be considered, this seems to me to imply too short a time horizon and too restrictive a test. Two years is not a particularly long time compared to the time involved in litigating a merger. Self-correction within that time seems to me to make the problem not worth bothering about, particularly since the power to raise prices by five percent if everybody colludes does not imply that prices will in fact be so raised. I would be inclined to use a longer time, perhaps two years for market definition and four years for ease of entry. Again,

however, it is hard to be sure. Since market definition is the threshold event for analysis, a more stringent rule may be appropriate in deciding whether to investigate further than in deciding whether to challenge a merger. Certainly, a more stringent rule is appropriate in that circumstance than in setting a standard for judicial decisions.

This brings me to an important point. There is a difference between deciding on guidelines for triage -- guidelines as to what cases to investigate or oppose, and deciding on a judicial standard. Arbitrary rules are inevitable and may even be useful in the first context. They are a menace in the second. The Department of Justice has not always recognized the difference, particularly when it comes to the use of concentration measures.

The principal reason for such unwise concentration on what ought to be the non-question of market definition is that things "in" the market will be counted in measures such as market shares or concentration indices which, it is vainly hoped, give simple answers to questions of market power or the likelihood of anti-competitive activity. Things "out" of the market, on the other hand, play a much more minor role, often coming in, if at all, in terms of a makeweight reference to ease of or barriers to entry. The problem is that the use of such indices does not in fact produce correct results.

The fact is that the analysis of oligopoly does not yield useful results relating structure to conduct and performance. We know in a general way what the features are that make conscious parallelism more or less likely (number and size distribution of firms, complexity of the product, etc.). Unfortunately, such

knowledge is nowhere near precise enough to substitute for the study of specific situations. In particular, while it is clear that conscious parallelism is more likely the smaller the number of firms, it is not true that we have any serious idea as to whether the danger point is reached at four firms rather than five or, indeed, what the function in question lokks like. Similarly, while it seems clear that conscious parallelism is more likely the more concentrated is the market, there is no sound reason for picking out particular levels of the Herfindahl-Hirschman Index (HHI) as danger points. Indeed, while the HHI itself seems a reasonable way to measure concentration, there is neither theory nor reliable econometric evidence showing that the HHI is a sufficient statistic for the effects of concentration on non-competitive behavior.[15]

It would therefore be a great mistake if courts (or Congress) were to adopt the practice of judging mergers by looking only or even primarily at pre- and post-merger HHI levels. As with market shares in monopoly cases, the HHI provides only the crudest of indications as to what we want to know. Any serious merger case must ask specifically about the possibility of tacit collusion. This means an investigation of the particular situation involved including (but not necessarily limited to) a serious analysis of ease of entry.

Such strictures, however, do not apply to the use of the HHI for administrative purposes as in the DOJ Guidelines. With limited resources and finite time, the antitrust authorities must decide somehow what cases to investigate and then pursue. If

that decision is not itself to require a full-dress investigation, then some rules must be used that can be applied fairly readily. In that circumstance, the use of the HHI to trigger or turn off investigation appears warranted.

Since I would only use the HHI in this way, such questions as how to treat foreign competition recede in importance. If quotas exist or are likely, then the availability of foreign capacity does not put the same constraint on post-merger anticompetitive behavior than would the same capaicity in independent domestic hands. I would calculate the HHI both including foreign production beyond the quota level and excluding it. If it makes a difference, then there is something to analyze and investigate further. There is no point in wasting time arguing which one is the "right" computation. As with market definition, it is a mistake to suppress the fact that foreign competition may matter in a different way from domestic competition by forcing a decision that foreign competition is either the same as domestic or not present at all. Calculation of the HHI ought not to be the point of a merger analysis, but only a signal for further investigation.

Are the levels currently used in the Guidelines the right ones to use as such signals? How can one know? Plainly, a very low post-merger HHI makes it most unlikely that anticompetitive behavior will (or can) result from the merger. Plainly also, a merger that raises the HHI by a very large amount and leaves it very high is one that requires investigation. But what do "very low" and "very high" mean? Is the 1800 cut-off the right one? To know this with much certainty would be to know what we empha-

tically do not know -- exactly how the HHI relates to non-competitive behavior.

One can get a little farther than this, however. The danger of setting the trigger levels of the HHI too high is that anti-competitive mergers will slip through. One of the dangers of setting them too low is that the antitrust authorities will be beset with many cases of high HHIs with claims of offsetting effects (and may lose such cases if they go to trial). What has been the experience in this regard under the Guidelines? I suspect that the call for DOJ to consider other things besides concentration suggests that the trigger levels are set low rather than high, particularly because my experience suggests that DOJ has a strong tendency towards too narrow a market definition.[16]

This is not necessarily a bad thing. If the purpose of setting such levels is to trigger investigation, it may well be better to waste resources on an investigation of a merger that is shown to be harmless than to fail to investigate a merger that will turn out to be harmful.

Unfortunately, there are other costs to low trigger levels. Mergers are sometimes delicate creatures, and antitrust litigation can be extremely expensive. The HHI levels set in the Guidelines can therefore act to deter mergers that involve such levels. Setting the levels low can deter socially useful mergers. This is particularly likely if the trigger levels are used by the authorities not as signals to investigate but as signals to oppose. Alas, this is likely to be the case. There is a natural, if distressing tendency for the Antitrust Division

to become fascinated with its own Guidelines, and to focus on the HHI levels mentioned therein as though failure to pass the tests of the Guidelines were proof that a merger was anticompetitive rather than merely being a signal for further analysis.

The primary (but not necessarily) the only item in such further analysis is the investigation of barriers to entry. Unfortunately, while this is generally recognized in principle, there is mass confusion over what it involves in practice.

The analytic use of the term "barriers to entry" comes as part of the sentence: "Barriers to entry prevent the competitive process from working." Similarly: "Where entry is easy, there can only be a competitive result." Accordingly, a barrier to entry must be something that interferes with competition. It must be something that allows incumbent firms, if they collude, to charge non-competitive prices and earn supra-normal profits.

It follows that not everything that makes entry appear difficult or uninviting is necessarily a barrier to entry. The mere necessity of building a plant when incumbents have already built theirs is not such a barrier (although associated economies of scale can be). Neither is the necessity of advertising or creating a reputation automatically a barrier. To be a barrier, the phenomenon involved must give incumbents a long-run advantage, permitting them to earn supra-normal profits on the whole process of getting into the market and continuing to act, without inducing others to enter and bid those profits away.[17]

This is not an easy concept to apply in practice, and the Antitrust Division does not have a good track record here. A recent example will serve to illustrate the point.[18]

In the recent Northwest-Republic airline merger (in which I was a witness for Northwest), DOJ took quite a narrow view of the market. In addition to the position discussed in footnote 16, above, DOJ argued that air passenger traffic on routes out of the merged airline's Minneapolis hub, could only be effectively competed for by another airline also having a hub at Minneapolis. This is not a compelling position. What keeps an airline with a hub at Denver from competing on equal terms with one at Minneapolis for traffic between the two cities? Why cannot an airline with a hub at Dallas, say, and already serving cities between Dallas and Minneapolis simply extend its flights to compete for traffic between Minneapolis and those other cities? But I put these questions aside in order to concentrate on barriers to entry and assume arguendo that a hub at Minneapolis would be necessary to compete with the merged airline.

There were no obvious barriers to another airline's constructing such a hub. Landing slots were not a problem, nor were gate facilities. Further, since both Northwest and Republic already had hubs at Minneapolis, it could not be the case that economies of scale made the possession of such a hub a natural monopoly.

Why then did the DOJ claim that there were barriers to entry and go on to oppose the merger? Because, said the Antitrust Division, Minneapolis is not an attractive place to have a hub. It is too far North to be an efficient connecting point between major East and West Coast cities, and other airlines will not find it attractive to build a hub there in the presence of the

large number of flights "controlled" by the post-merger Northwest. Indeed, DOJ conducted an informal survey of other airlines who told them that they would not regard hubbing at Minneapolis as an attractive post-merger proposition.

This position misunderstands the proper analysis of barriers to entry. The issue should have been whether other airlines would find hubbing at Minneapolis attractive <u>if the post-merger Northwest sought to raise prices and reduce output</u>. Whether or not other airlines would find Minneapolis attractive with the post-merger Northwest aggressively competing by offering the service previously flown by the two merger partners and doing so at the pre-merger price was irrelevant. Even more obviously irrelevant was the issue of whether Minneapolis is inherently an attractive hub. The geographical position of Minneapolis is not something that gives incumbents an advantage over entrants.

Having said this, I cannot forbear adding that DOJ was factually wrong about the attractiveness of Minneapolis as a hub. In fact, because the earth is a sphere, the usual Mercator projection of North America gives a quite misleading picture. The great circle routes from East to West Coast cities pass quite close to Minneapolis, and that, together with prevailing winds and traffic patterns makes it the second most attractive hub for such flights, a few minutes worse than Chicago. Shockingly, DOJ's position on this indisputable matter persisted after the hearing in the case. At discussions following those hearings, higher-ups in the Division made the same argument about Minneapolis's position and were quite surprised to learn that they were wrong. The symbolism is clear. I fear that, at least as regards

the analysis of barriers to entry, the Department of Justice still believes that the earth is flat.

This is a pity. Particularly if markets are to be narrowly defined and HHI levels that trigger further investigation set relatively low, the analysis of entry is absolutely crucial. I would put great weight on it in considering a prospective merger.

Having said this, I must go on to caution against attempts to avoid what ought to be a thoughtful and detailed analysis of this important question by the creation of some summary measure of ease of entry. Just as the state of our knowledge does not permit the HHI to serve as more than a rough signal of the need for further investigation, so also we know too little to be able to produce a useful quantitative index of ease of entry. While this may change as the science progresses, it is well to avoid premature attempts in this regard. There is a great temptation for the antitrust authorities (and perhaps the courts) to focus on quantitative standards as a substitute for real analysis. Economists ought not to offer such temptation unless the delivery soundly backs up the promise.

Another example drawn from the Northwest-Republic case is illustrative here. Correctly observing that airlines are more likely to enter a given city-pair route if they have traffic that feed into that route (more likely to enter Kansas City-Minneapolis service, for example, if they can collect passengers from other origins at Kansas City), DOJ introduced a measure of likelihood of entry called the "feed ratio." That measure was constructed as follows for a given city pair, A and B. Assume

first that there is only one incumbent airline and one potential entrant. The "feed ratio" is the ratio of the sum of the potential entrant's emplanements at A and B divided by the sum of the incumbent's emplanements at the two cities. Where there is more than one incumbent-entrant pair, the "feed ratio" is taken to be the maximum over all such pairs of this ratio of emplanements. DOJ argued (at least at first) that the fact that the "feed ratio" was relatively low for a number of routes involved in the merger showed that entry was difficult.

This is, of course, nonsense. Consider the Boston-Minneapolis city pair, for example. Passengers wishing to fly between those cities must, by definition, be flying on an incumbent airline. Other passengers emplanng at those cities are certainly going somewhere else. Of what possible relevance to a decision by Delta to enter Boston-Minneapolis service is the fact that my wife, who has no reason to travel to Minneapolis, sometimes flies from Boston to Cincinnati to visit her parents?

It is thus not surprising that the "feed ratio" fails to predict actual entry and not surprising that the chief witness for DOJ eventually admitted that it was not an entry predictor. What is disturbing is that DOJ made a fair production of putting it forward. I believe this was because of the powerful lure of spurious measurability. That lure should always be resisted.

After the decision to investigate a proposed merger has been taken on the basis of the HHI, ease of entry is the phenomenon that should be investigated first. That is so, first because of the intrinsic importance of the role of potential entry (or the lack thereof) and, second, because a finding that entry is easy

should be dispositive. Where entry is not easy or the issue in doubt, further investigation must be undertaken as to the likely effects of the proposed merger on competition and, if those effects are found to be negative, on any offsetting efficiencies.

Having gone beyond an analysis of entry to an analysis of other factors bearing on effects on competition, I would not merely use those other factors as tie breakers. One analyzes concentration first as a threshold matter. One then analyzes entry because it may dispose of the question if the answer comes out a particular way. But one must not forget that we do not have a good enough theory of oligopoly to be able to infer anti-competitive results from structure in any precise way. Instead, merger analysis should always bear in mind that the question at issue is the likelihood, or at least the ease, of anticompetitive behavior. The complexity of the product, the extent to which an effective tacit agreement would require implicit collusion on many negotiated transaction prices instead of a single list price, the ease with which cheating on a tacit agreement can be detected, these and similar matters are properly subjects for analysis once it appears that concentration will be high and entry difficult. It is not unnatural that the burden of proof in such matters will devolve onto the participants in the prospective merger, but that is not to say that such matters should only come into play in otherwise doubtful cases.

The burden of proof as to cost savings or other offsetting efficiencies whould also be on the proponents of a merger, but here I would require a very high standard. That is because such

claims are easily made and, I think, often too easily believed. Two examples will illustrate this.

When General Motors and Toyota proposed a joint venture to assemble a small car in California, one would have thought that antitrust considerations would have prevented it. Here the two largest automobile manufacturers in the world were combining to produce a vehicle. The price of that vehicle was likely to provide an obvious reference point for the setting of other prices. Even though GM and Toyota proposed to set the price in question by reference to a particular average of other car prices, the very use of a particular average seemed likely to facilitate conscious parallelism. Yet the Federal Trade Commission approved the joint venture. It did so principally because of the argument that the venture would realize efficiencies, since GM would learn from Toyota the secrets that made Japanese automobile manufacture more efficient than American. Presumably, GM would then be able to use those secrets in other plants.[19]

It is far from clear that the efficiency argument accepted by the FTC was more than superficial. The so-called Japanese "secrets" were not believed by Ford officials, at least, to be secrets at all. The Japanese system of labor relations and inventory management were believed to be the source of efficiencies. It hardly took a joint venture to learn about those. Moreover, to the extent that there were production "secrets" to be learned, it seemed unlikely that GM would learn very much from an assembly plant when the engines were produced in Japan. Finally, GM already had relations with other Japanese automobile manufacturers.

All in all, the FTC appears to have been too easily swayed by the difficulties of the American automobile industry and the success of the Japanese. It accepted fairly superficial promises of efficiencies to be gained and approved an arrangement likely to be anticompetitive. One need only contemplate the likely result of a similar application for a joint venture by GM and Ford, for example, to realize the tremendous weight that the efficiency argument was given.

My second example relates once again to airlines. Here, the Department of Transportation (DOT) has approved a whole series of mergers. On the whole, I regard those approvals as warranted. The entire process of airline deregulation rests on the view that city-pair "markets" are contestable. So long as landing slots and other facilities are available (or can be purchased from a large number of airlines), there is a strong presumption that mergers of domestic airlines cannot result in much market power.

That presumption, however, does not extend to situations where entry is in fact difficult, and it does not automatically extend to acquisitions involving foreign routes. In particular, DOT's approval of United Airlines acquisition of Pan American's Pacific Division is open to very serious question.[20]

Entry into air transportation between the United States and Asia is far from easy. This is particularly true as regards service between Japan and the United States, and that service plays a vital role both because of Japan's importance as a trading partner and because of its geographic position. Deregulation does not apply to that service, and, indeed, the Japanese

have been historically reluctant to permit expanded service. Further, there are considerable restrictions on the use of Tokyo's Narita airport.

Before the acquisition, Japan-U.S. mainland service was quite concentrated (an HHI of 2542 in 1984). The acquisition would permit the number four carrier (United), with about 7 percent of the market to combine with the number three carrier (Pan American) which had about 19 percent. Numbers one and two (Japan Air Lines and Northwest) each had a bit more than 30%. The acquisition (in terms of 1984 figures) caused an increase in the HHI from 2542 to 2812, well beyond the trigger levels set in DOJ's Guidelines.[21]

Before the acquisition, there was substantial price competition of various kinds. United, in particular, had actively sought to increase traffic through its Seattle gateway. After the acquisition, it seemed likely that United could attract traffic without competing on price, first by manipulating its Apollo computer reservation system, and second, because it would be the only airline providing both a really extensive route structure in the United States (acquired during regulation) and a large system of routes connecting at the Tokyo hub -- the latter being Pan American's legacy from regulation.

There is no doubt that the provision of such integrated service meant a real benefit to pasengers. DOT very properly regarded this as an efficiency. What is not so clear is whether that efficiency should have justified the acquisition.

Had the acquisition not been approved, Pan American would have either sold its Pacific Division to a different domestic

airline not already serving Japan or else would have continued to operate it itself. (The Pacific Division was profitable, and, before the acquisition, Pan American had announced plans for expanded Pacific service for the summer of 1985.) In the latter case, Pan American would certainly have continued its program to expand its domestic route structure. Hence, forbidding the acquisition would not have prevented integrated service from developing.

Pan American was not the only airline that would have developed such integrated service. Northwest, which had gradually developed its own Tokyo hub, was also striving to expand its domestic route system. (After the transfer of the Pacific Division, largely because of the need to catch up with the post-acquisition United, Northwest strove to expand quickly by acquiring Republic.)

Most important, United itself could have expanded. United was already creating a rival hub at Seoul. Further, while entry into Japan was difficult, it was not impossible, and the United States government could have made expansion by United a primary object of negotiations with Japan. This was a very real possibility, because the Spring of 1985 saw an agreement between the two countries to open as many as three new routes. United could have been given those routes.

In short, absent the acquisition, there might well have been three companies competing to provide integrated service. The acquisition reduced that number to no more than two. In this connection, DOT took a very limited view of its responsibilities,

refusing, for example, to connect the award of the new routes with the outcome of the case. It appears to have been impressed with the irrelevant argument that the post-acquisition United would be a stronger competitor than the pre-acquisition Pan American.

As this suggests, I would not approve mergers because of efficiency considerations if the efficiencies involved could be obtained in a less restrictive way. Further, I would hesitate to use such efficiencies as an excuse for permitting a merger if those efficiencies are unlikely to be passed on to customers. In the Pacific Division case, for example, the benefits of integrated service could have been achieved while maintaining competition. That would have ensured that the travelling public would have benefitted from those efficiencies without paying more for them in the form of increased prices. The approval of the acquisition created the efficiencies but also made it very likely that all benefits would be captured by United itself.

I am, of course, sensible of the argument that transfer payments ought not to matter to economists, so that one should only be concerned with the question of whether efficiencies obtained outweigh deadweight loss and not with the question of who captures the savings. In practice, however, I would not approve mergers for efficiency reasons if they seemed otherwise likely to be anticompetitive. Efficiency arguments are easy to make, but hard to evaluate. The same efficiencies will often be achievable in less restrictive ways, particularly if one waits; mergers, on the other hand, have a way of being permanent. Finally, a policy of approving anticompetitive mergers for effi-

ciency reasons is likely to promote a dissipation of resources into rent seeking.

All of this, however, supposes that a proper merger analysis has been carried out and the proposed merger found to be anti-competitive. I would certainly accept evidence of efficiencies as showing that the merged enterprise will be a tougher competitor. If merger analysis continues to be dominated by the measurement of concentration, I would put considerable weight on such a showing as offsetting the really crude presumption resulting from market definition and the HHI.

To sum up then, I think the DOJ Guidelines are roughly right if properly interpreted. Such proper interpretation, however, requires the use of market definition and the HHI only as signalling the necessity of serious analysis. If that is done, then pre-merger screening can serve an important useful purpose, preventing lengthy litigation to force the disgorgement of already digested assets.

On the other hand, there has been a tendency for the Guidelines to substitute for analysis, with DOJ focussing on issues of market definition and concentration measures. That is a mistake. In the present (and likely future) state of our knowledge, serious analysis of market power and oligopoly cannot be subsumed in a few spuriously precise measurements.

The Reagan administration has generally been very permissive in its merger policies. To an extent, that permissiveness may be viewed as a correction to the tendency of DOJ staff to substitute HHI measurement for economics, but that is only true if one

thinks of different mergers as substitutes for each other. In fact, mergers have sometimes been wrongly blocked (or at least opposed by DOJ) because of unthinking application of Guideline standards, and sometimes wrongly approved because of a wish to find efficiency excuses (a wish that may be greatest where competition with foreigners is involved as in GM-Toyota or United-Pan American). The two mistakes do not compensate for each other, and neither approach is a substitute for sound analysis.

Footnotes

1. Brown Shoe Company v. United States, 370 U.S. 294 (1962).

2. The "incipiency" doctrine goes back to Congressional discussion of the original Clayton Act. (See Senate Report No. 698, 63rd Cong., 2nd Sess. (1914), p. 1.) The same language was used when Section 7 was amended in 1950 (Senate Report No. 1775, 81st Cong., 2nd Sess. (1950), pp. 4-5), and by the Brown Shoe Court (370 U.S. 294 at 317, 346), as well as in later opinions.

3. United States v. Von's Grocery Co., 384 U.S. 270 (1966).

4. United States v. Aluminum Company of America, et al., 148 F. 2d 416 (1945).

5. Whether that standard is always wisely applied or well understood is a different matter. See F.M. Fisher, J.E. Greenwood, and J.J. McGowan, Folded, Spindled, and Mutilated: Economic Analysis and U.S. v. IBM (Cambridge, Mass.: MIT Press, 1983).

6. This may be the reason that the antitrust authorities have attempted to invent a doctrine of "shared monopoly." See In the Matter of Kellogg Company, et al., FTC Docket No. 8883 (decided 1981).

7. Consideration of the absence of any serious remedy in the second American Tobacco case (United States v. American Tobacco Co., 328 U.S. 781 (1946)) or of the history of litigation and investigations in the cement industry will illustrate the problem. I take no position on whether structural remedies would have been effective in these industries.

8. It may, of course, be considered an objection to a structural policy towards oligopoly that (unlike the case of structural Section 2 cases where all the acts are under the control of a single firm) individual firms doing nothing wrong in itself will be penalized because of actions (also not wrong in themselves) taken by others. There is no escape from this problem. Attacking it in terms of merger policy either does not solve it at all or else makes it worse in the sense of penalizing two firms for acts that might later be taken by others. It is well to remember that such objections have less force when considering civil, rather than criminal cases.

9. United States Department of Justice, Merger Guidelines, Federal Register, Vol. 49 (1984), 26,284.

10. United States v. E.I. duPont de Nemours and Company, 353 U.S. 377 (1956). See G.W. Stocking and W.F. Mueller, "The Cellophane Case and the New Competition," American Economic Review 45 (March 1955), pp. 29-63; C. Kaysen and D.F. Turner, Antitrust Policy (Cambridge, Mass.: Harvard University Press, 1959), p. 102; and R.A. Posner, Antitrust Law: An Economic Perspective (Chicago and London: University of Chicago Press, 1976), pp. 127-128.

11. It may or may not have been a coincidence that, after the acquisition was challenged by the Federal Trade Conmmission, Stouffers began a series of television commercials that featured someone tasting a Stouffer's product and saying something like "What is it? It tastes like lasagna, but it isn't lasagna." The case was eventually settled.

12. For a more detailed discussion of these issues in the context of Sherman Act, Section 2 cases, see Fisher, McGowan, and Greenwood, _op. cit._, Chapter 3.

13. _United States_ v. _United Shoe Machinery Corporation_, 110 F. Supp. 295 (1953) at 341; _United State_ v. _Aluminum Company of America, et al._, 148 F. 2d 416 (1945) at 430.

14. On these matters, see Fisher, McGowan, and Greenwood, _op. cit._, Chapter 7, F.M. Fisher and J.J. McGowan, "On the Misuse of Accounting Rates of Return to Infer Monopoly Profits," _American Economic Review_, Vol. 73 (March 1983), pp. 82-97, and F. M. Fisher, "On the Misuse of the Profits-Sales Ratio to Infer Monopoly Power," Massachussetts Institute of Technology Working Paper 364 (Revised April 1986).

15. The HHI is defined as the sum of squares of the shares of the individual firms multiplied by 10,000 (to eliminate inconvenient decimal points). Before the multiplication by 10,000, an HHI of 1/n can be thought of as the level of concentration (so measured) that would occur if there were n identically-sized firms in the market.

Studies attempting to relate profit levels to HHI values are not reliable guides to the influence of concentration on non-competitive behavior. See Fisher and McGowan, _op. cit._ and Fisher, _op. cit._. Even on their own terms, such studies are not so successful as to warrant basing merger policy on them.

16. In the Northwest-Republic airline merger (_NWA-Republic Acquisition Case_, Department of Transportation Docket 43754 (1986)), DOJ insisted that one-stop or connecting airline service was not in the same market as non-stop service. In so doing, it

based its arguments on the undeniable fact that all travelers prefer non-stop service to one-stop or connecting service if the flights leave at the same time and have the same price. Such an argument takes a very limited view of substitution and market definition. In fact, people take one-stop or connecting flights in preference to non-stop flights if they get something thereby. That something can be time-of-day convenience or it can be a lower price. A large box of a particular breakfast cereal typically sells for a higher price than does a small box. That does not put them in different markets, and, in fact, the prices of the different types of flights tend to move together.

17. For an extended discussion of these matters, see C. C. von Weizsäcker, Barriers to Entry: A Theoretical Treatment (Berlin, Heidelberg, New York: Springer-Verlag, 1980) and Chapter 6 of Fisher, McGowan, and Greenwood, op. cit..

18. For an older one, see Fisher, McGowan, and Greenwood, loc. cit..

19. [CITE NEEDED]. I was retained by counsel for Ford who eventually decided not to bring suit to oppose the joint venture.

20. Pacific Division Transfer Case, Department of Transportation Docket 43065 (1985). I was a witness for Northwest Airlines which opposed the acquisition. My views on the matter are set forth at length in F. M. Fisher, "Pan American to United: The Pacific Division Transfer Case," Massachusetts Institute of Technology Working Paper 420 (May, 1986).

21. It is worth remarking that the testimony offered by DOJ in opposition to the acquisition was focussed very heavily on the

HHI and the *Guidelines*. United and Pan American were ready for this. They had previously prepared a study for use in rebuttal purporting to show the not very surprising fact that city-pair HHIs had little effect on fares. The result was largely to divert argument from the more substantial questions at issue.